

Claim 41: after "thereof" please insert -- . --.

C3 42. (amended) The [antibody or fragment] composition of Claim 41 wherein the antibody is prepared by the steps of immunizing [immunization of] a transgenic animal capable of producing human antibodies and recovering the human antibodies.

44 45. (amended) The [antibody or fragment] composition of Claim 44 wherein the epitope comprises the BB' loop.

C4 45 46. (amended) The [antibody or fragment] composition of Claim 44 wherein the epitope comprises the EF loop.

Please add the following new claims:

Rule 12 47 48. (new) The composition of Claim 37 wherein the antibody or fragment thereof binds preferentially to an osteoprotegerin binding protein comprising the amino acid sequence of Figure 4 (SEQ ID NO:39) or to a soluble form of said sequence, or to a fragment of said sequence.

C5 48 49. (new) A composition comprising an antibody or fragment thereof and a pharmaceutically acceptable diluent, carrier, solubilizer, emulsifier, preservative and/or adjuvant, wherein the antibody or fragment is present in an amount effective to inhibit bone resorption in a patient, and wherein the antibody is produced by immunization with an osteoprotegerin binding protein comprising the amino acid sequence of Figure 1 (SEQ ID NO:37), Figure 4 (SEQ ID NO:39), a naturally occurring variant thereof, a soluble form thereof, or a fragment thereof.

49 50. (new) The composition of Claim 48 which comprises a monoclonal antibody or fragment thereof.

50 51. (new) The composition of Claim 48 which comprises a human antibody or a fragment thereof.

51 ⁴⁸ 52. (new) The composition of Claim ~~49~~ which is further modified to a chimeric antibody or a CDR-grafted antibody.

52 ⁴⁸ 53. (new) The composition of Claim ~~49~~ prepared by the steps of immunizing a transgenic animal capable of producing human antibodies and recovering the human antibodies.

53 ⁴⁸ 54. (new) The composition of Claim ~~49~~ wherein the antibody or fragment is produced by recombinant DNA expression.

54 ⁴⁸ 55. (new) The composition of Claim ~~49~~ wherein the antibody or fragment binds to an epitope on the extracellular domain or to an epitope on a fragment of the extracellular domain of an osteoprotegerin binding protein.

55 ⁵⁴ 56. (new) The composition of Claim ~~55~~ wherein the epitope comprises the BB' loop.

56 ⁵⁴ 57. (new) The composition of Claim ~~55~~ wherein the epitope comprises the EF loop.

57 ⁴⁸⁻⁵⁶ 58. (new) The composition of any of Claims ~~49-57~~ further comprising a bone morphogenic factor selected from the group consisting of BMP-1 to BMP-12, transforming growth factor- β , a transforming growth factor- β family member, a fibroblast growth factor selected from the group consisting of FGF-1 to FGF-10, an interleukin-1 inhibitor, a TNF α inhibitor, parathyroid hormone, an E series prostaglandin, a bisphosphonate, or a bone-enhancing mineral.

REMARKS

The Claims

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Claims ~~37-47~~ are currently pending in the application. Amendments to the claims have been introduced in order to further clarify the invention and are fully supported in the specification. Support in Claim 37 for an osteoprotegerin binding protein (hereafter "OPG bp") comprising the amino acid sequence of Figure 1 (SEQ ID NO:37) or an osteoprotegerin binding protein comprising the amino acid sequence of Figure 4 (SEQ ID NO:39) is found in Examples 3 and 5 of the specification. Support for a